

Horizon Discovery Biosciences Limited PunchOut End User Overview

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horizonTM
INSPIRED CELL SOLUTIONS

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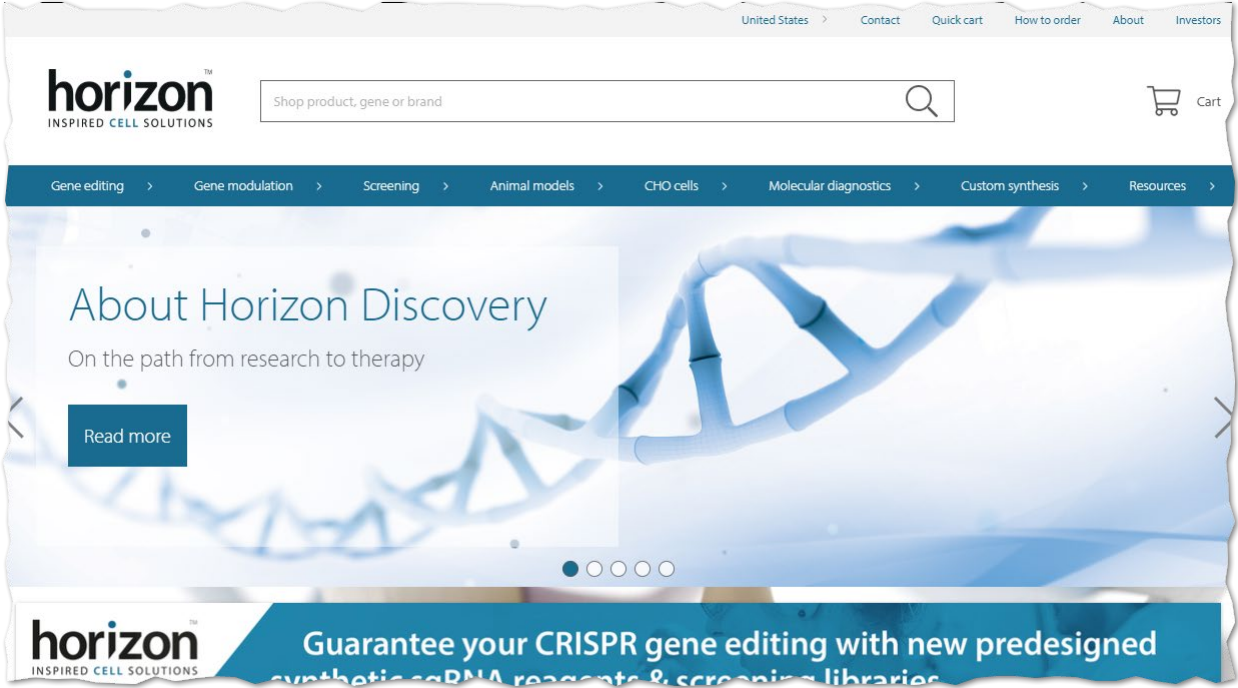


Benefits of PunchOut

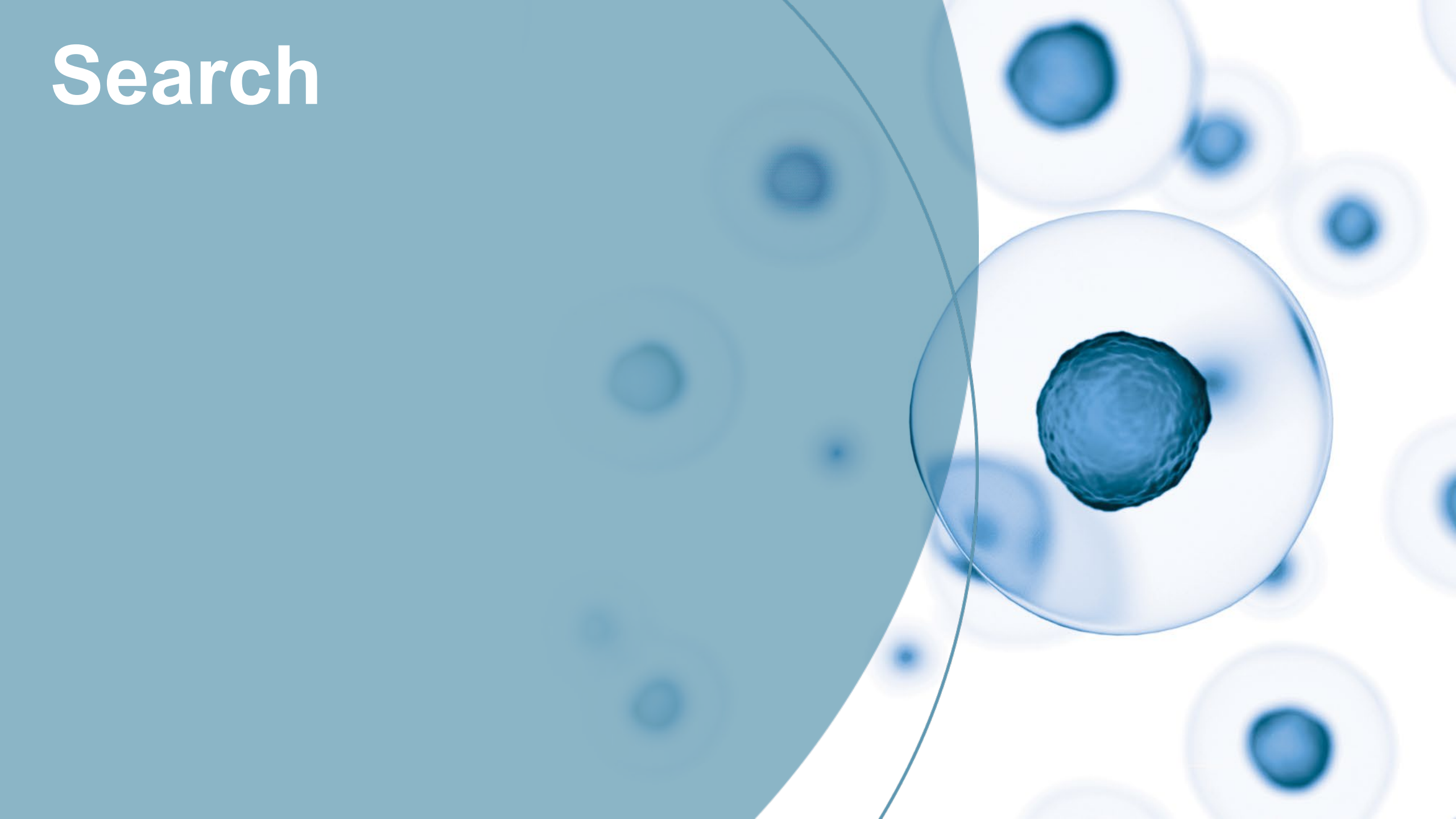
- **Quicker and simpler order processing**
- **Elimination of order entry errors**
- **Improved communication with optional automatic order, change, and ship notifications**
- **Increased invoice accuracy with optional electronic invoicing**
- **Integrate with procurement platform for budgeting and costing**
- **Reduce workload for procurement agents and buyers**
- **Purchase configurable products such as custom libraries, designs, and synthesis**

Punchout Setup

From your procurement system, click logo to initiate session

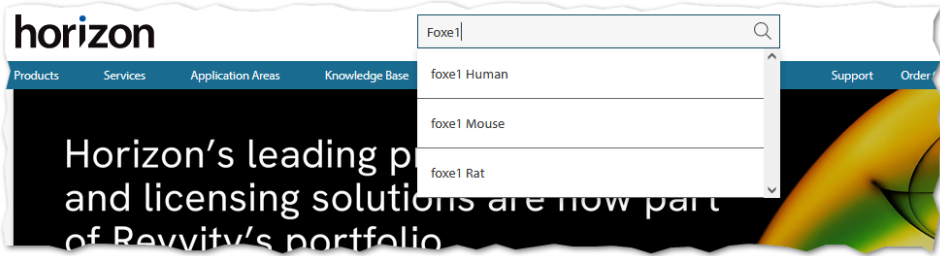


Search

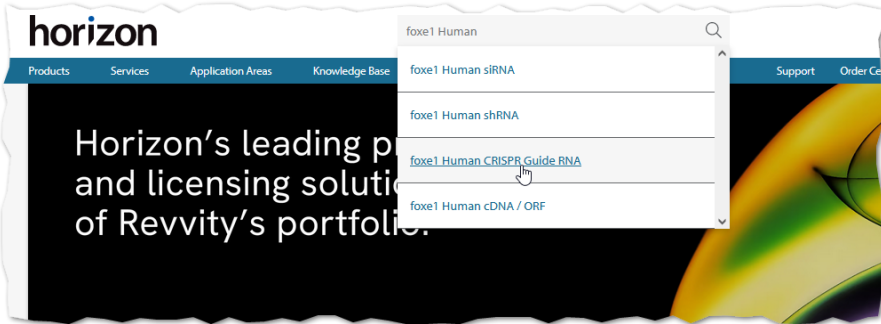


Suggested Search

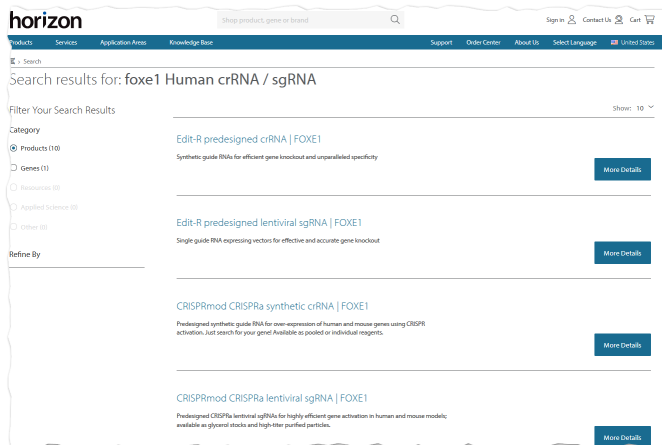
Suggested search in drop-down menu



1



2



3

Type in a valid gene symbol

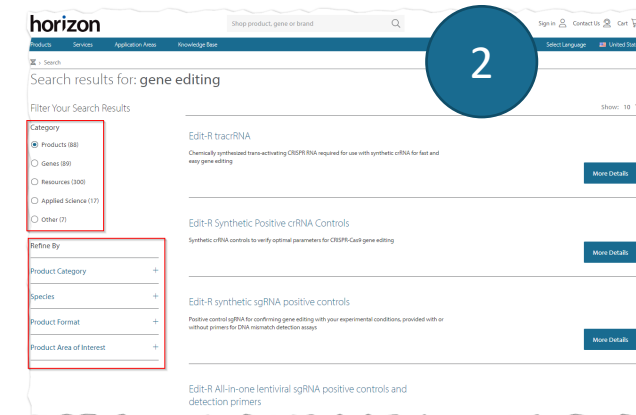
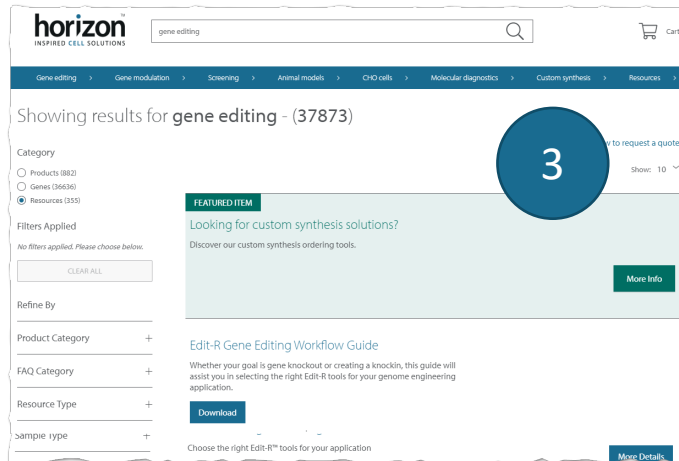
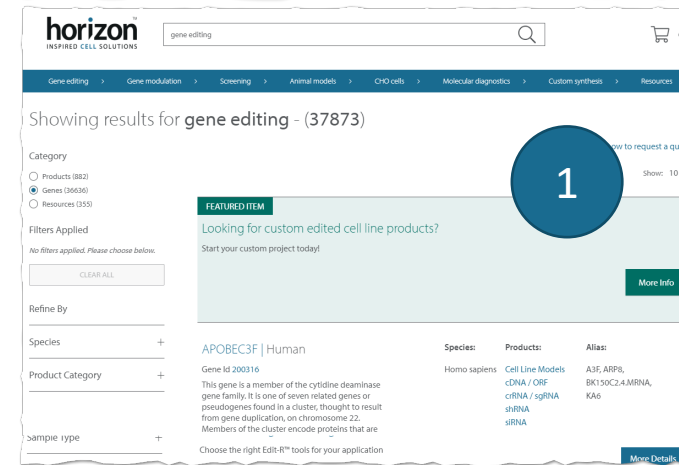
1. Select species
2. Select product category
3. Products for that species, gene and product category will appear

Search

Show results for:

1. Products – view product information or add to cart
2. Genes – view available products by genomic identifier
3. Resources – view available resources such as product documents, application guides, etc.

Refine your results using various dynamic filter options



Gene Based Products



Gene Based Products

Filtering product selections

Showing results for foxe - (18) [see how to request a quote](#)

Category

- Products (0)
- Genes (18)
- Resources (0)

Filters Applied

No filters applied. Please choose below.

Refine By

Species

- African Clawed Frog
- Human
- Mouse
- Rat
- Western Clawed Frog

Product Category

- cDNA / ORF
- Cell Line Models
- crRNA / sgRNA
- shRNA

1

2

3

FEATURED ITEM

Looking for custom edited cell line products?
Start your custom project today!

Gene Symbol Species	Species	Products	Alias
FOXE1 Human	Homo sapiens	Cell Line Models cDNA / ORF crRNA / sgRNA shRNA siRNA	FKHL15, FOXE2, HFKH4, HFKLS, NMTC4, TTF2, TTF-2, TTF2
FOXE3 Human	Homo sapiens	Cell Line Models cDNA / ORF	AAT11, ASGD2, CTRCT34, FKHL12, FREAC2

Search by: Gene Symbol, Gene ID, Accession, Description, Catalog Number

1. Select gene symbol to drill into products
2. Or select product category to drill into products
3. Filter by Species and Product Category

Product Selection and Add to Cart

1. Product Selection

- View products for a particular gene and product category selection
- Select product line to order

2. Configuration

- Select from various product configuration options
- Notice how selections give updated target and other details

3. Add to Cart

1

FOXE1 (HUMAN)
forkhead box E1
Alias
FKHL15|FOXQ2|HFKH4|HFKL5|NMTC4|TITF2|TTF2

ENTREZGENE 2304

This intronless gene encodes a protein that belongs to the forkhead family of transcription factors. Members of this family contain a conserved 100-amino acid DNA-binding 'forkhead' domain. The encoded protein functions as a thyroid transcription factor that plays a role in thyroid morphogenesis. Mutations in this gene are associated with the Bamforth-Lazarus syndrome, and with susceptibility to nonmedullary thyroid cancer-4. (provided by RefSeq, Nov 2016)

Product Category
 Cell Line Models
 cDNA / ORF
 CRISPR / gRNA
 siRNA
 shRNA

Edit-R CRISPR (knockout) Human FOXE1 Lentiviral sgRNA
Guaranteed to edit the target gene of interest. Transduction-ready DNA eliminates cloning and in vitro transcription steps. Algorithm-optimized to maximize the likelihood of functional protein knockout and reduce off-target editing. Available as glycerol stocks and high-titer purified.

Go to Product Page

Edit-R CRISPRs (activation) Human FOXE1 Lentiviral sgRNA
Genome-wide human and mouse lentiviral sgRNA reagents are specifically designed for CRISPRa. When used in conjunction with dCas9-VPR expression, you can leverage the power of the CRISPR-Cas9 system for activation of your favorite gene.

Go to Product Page

Edit-R All-in-one Lentiviral sgRNA Human FOXE1 sgRNA
Guaranteed to edit the target gene of interest. Transduction-ready DNA eliminates cloning and in vitro transcription steps. Algorithm-optimized to maximize the likelihood of functional protein knockout and reduce off-target editing. Available as glycerol stocks.

Edit-R pre-designed synthetic sgRNA
• Guaranteed to edit the target gene of interest
• Algorithm-optimized to maximize functional protein knockout and minimize off-target editing
• Transfection-ready synthetic RNAs eliminate cloning and in vitro transcription steps
• Chemically modified for improved nuclease resistance

Notes: All pre-designed guide RNA results ranked in order of expected knockout performance

2

FOXE1 (HUMAN)
forkhead box E1
Alias
FKHL15|FOXQ2|HFKH4|HFKL5|NMTC4|TITF2|TTF2

ENTREZGENE 2304

This intronless gene encodes a protein that belongs to the forkhead family of transcription factors. Members of this family contain a conserved 100-amino acid DNA-binding 'forkhead' domain. The encoded protein functions as a thyroid transcription factor that plays a role in thyroid morphogenesis. Mutations in this gene are associated with the Bamforth-Lazarus syndrome, and with susceptibility to nonmedullary thyroid cancer-4. (provided by RefSeq, Nov 2016)

Targets
PAM: AGG
Genomic Location: GRCO38.p12chr9:97854486-97854508-
Summary: FOXE1 Human Hits 1/1 Accessions

Select Product for: Edit-R CRISPR (knockout) Human FOXE1 synthetic sgRNA
1. Size
1 nmol 3 nmol 5 nmol 10 nmol
2. Select one item
 SG-011863-01-0005 SG-011863-02-0005 SG-011863-03-0005

\$499.00
Catalog ID: SG-011863-02-0005

[-] [+] [x] Add to Cart

3

Description Supporting Data Guarantee Specifications Resources

Functional and specific targeting for high-confidence gene knockout results
Edit-R pre-designed synthetic sgRNAs are chemically synthesized guide RNA for S. pyogenes Cas9 nuclease targeting and creation of Cas9-mediated DNA double-strand breaks in a genomic region of interest.
All Edit-R guides are algorithmically designed to efficiently generate functional protein knockouts, not just create an insertion or deletion. Additionally, chemical modifications are applied to all Edit-R

Configurable Products



Configurable Products

- **Design Tools**
 - CRISPR design
 - HDR donor design
 - siDESIGN center
- **Cherry-pick Libraries**
 - Custom libraries for: crRNA, siRNA, shRNA, miRNA, cDNA, ORF
- **Custom Synthesis**
 - siRNA, miRNA, RNA, DNA
 - Tube and plateable formats

Custom Ordering Tools

- CRISPR design tool
- HDR donor design
- Custom siRNA
- siDESIGN center
- Cherry-pick libraries
- Custom microRNA
- Custom SMARTpool
- ssRNA synthesis
- Custom DNA

All metadata is maintained throughout the transaction.

Design Tools

1. Select Knowledge Base in the main navigation menu
2. Select Tools and Calculators
3. Select one of the highlighted design tools

Knowledge Base -> Tools & Calculators

The screenshot shows the Horizon website's Knowledge Base page. The navigation menu at the top includes 'Products', 'Services', 'Application Areas', 'Knowledge Base', 'Support', 'Order Center', 'About Us', 'Select Language', and 'United States'. The 'Knowledge Base' menu item is highlighted with a red box and a blue circle containing the number '1'. Below the navigation, the 'Tools & Calculators' section is highlighted with a red box and a blue circle containing the number '2'. This section lists various tools and calculators, including Biochemical conversion tools (OD conversion, DNA copy number calculator), Reagent calculator (siRNA/miRNA calculator for screening, DharmafECT calculator for screening), BioIT beta tools (P-value to Z-score converter, T7EI calculator, nmol to µg calculator), Primer design & Analysis tools (Multiple primer analyzer, TM calculator), and qPCR (qpcr efficiency calculator). A sidebar on the right features a 'Contact a functional genomics expert' button and a 'On the Horizon Blog' section.

The screenshot shows the 'Product ordering tools' section of the Horizon website. The section is titled 'Product ordering tools' and is highlighted with a red box and a blue circle containing the number '3'. It lists several categories of tools and calculators:

- Gene editing ordering tools**
 - CRISPR design tool
 - HDR donor designer - oligo
 - HDR donor designer - plasmid
 - Cherry-pick library tool
- DNA ordering tool**
 - Custom DNA
- Gene knockdown ordering tools**
 - siDesign center
 - Custom siRNA
 - Custom miRNA
 - Single-strand RNA synthesis
 - Multiple single-strand RNA synthesis
 - Custom SMARTpool design
 - Cherry-pick library tool
- Experimental tools & calculators**
 - Biochemical conversion tools**
 - OD conversion
 - DNA copy number calculator
 - Reagent calculators**
 - siRNA/miRNA calculator for screening
 - DharmafECT calculator for screening
 - BioIT beta tools**
 - P-value to Z-score converter
 - T7EI calculator
 - nmol to µg calculator
 - Primer design and analysis tools**
 - TM calculator
 - Multiple primer analyzer
 - qPCR**
 - qPCR efficiency calculator

Custom Synthesis and Cherry Pick Library Tools

Product ordering tools

Gene editing ordering tools

- CRISPR design tool
- HDR donor designer - oligo
- HDR donor designer -plasmid
- Cherry-pick library tool

DNA ordering tool

- Custom DNA

Gene knockdown ordering tools

- siDesign center
- Custom siRNA
- Custom miRNA
- Single-strand RNA synthesis
- Multiple single-strand RNA synthesis
- Custom SMARTpool design
- Cherry-pick library tool

Experimental tools & calculators

Biochemical conversion tools

- OD conversion
- DNA copy number calculator

Reagent calculators

- siRNA/miRNA calculator for screening
- DharmafECT calculator for screening

BioIT beta tools

- P-value to Z-score converter
- T7E1 calculator
- nmol to µg calculator

Primer design and analysis tools

- TM calculator
- Multiple primer analyzer

qPCR

- qPCR efficiency calculator

1

Product ordering tools

Gene editing ordering tools

- CRISPR design tool
- HDR donor designer - oligo
- HDR donor designer -plasmid
- Cherry-pick library tool

DNA ordering tool

- Custom DNA

Gene knockdown ordering tools

- siDesign center
- Custom siRNA
- Custom miRNA
- Single-strand RNA synthesis
- Multiple single-strand RNA synthesis
- Custom SMARTpool design
- Cherry-pick library tool

Experimental tools & calculators

Biochemical conversion tools

- OD conversion
- DNA copy number calculator

Reagent calculators

- siRNA/miRNA calculator for screening
- DharmafECT calculator for screening

BioIT beta tools

- P-value to Z-score converter
- T7E1 calculator
- nmol to µg calculator

Primer design and analysis tools

- TM calculator
- Multiple primer analyzer

qPCR

- qPCR efficiency calculator

2

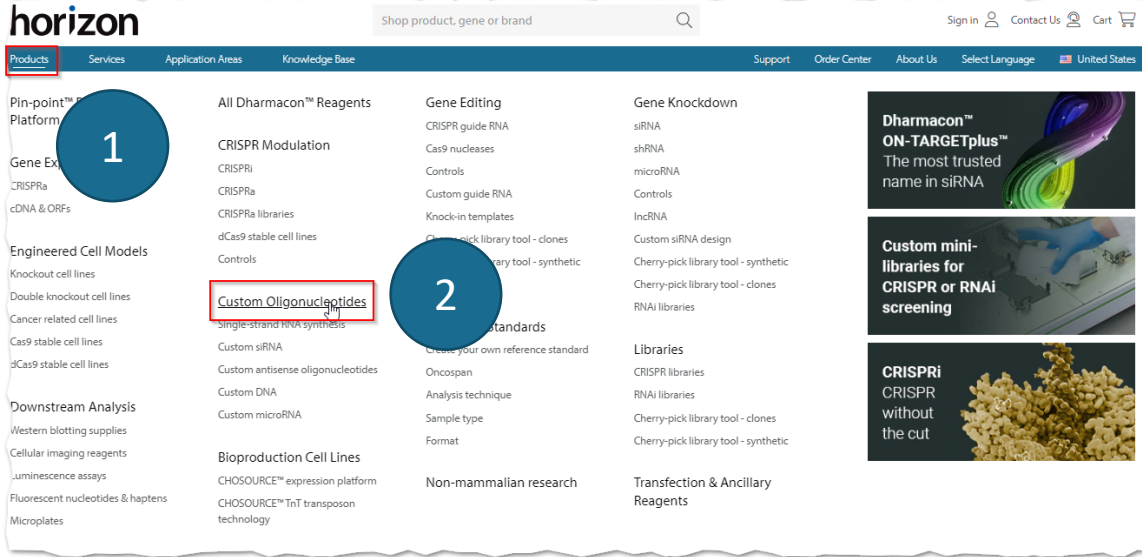
1. Select one of the highlighted tools for custom synthesis

2. Select the Cherry-pick library tool for custom plateable libraries for multiple product types

Custom Synthesis

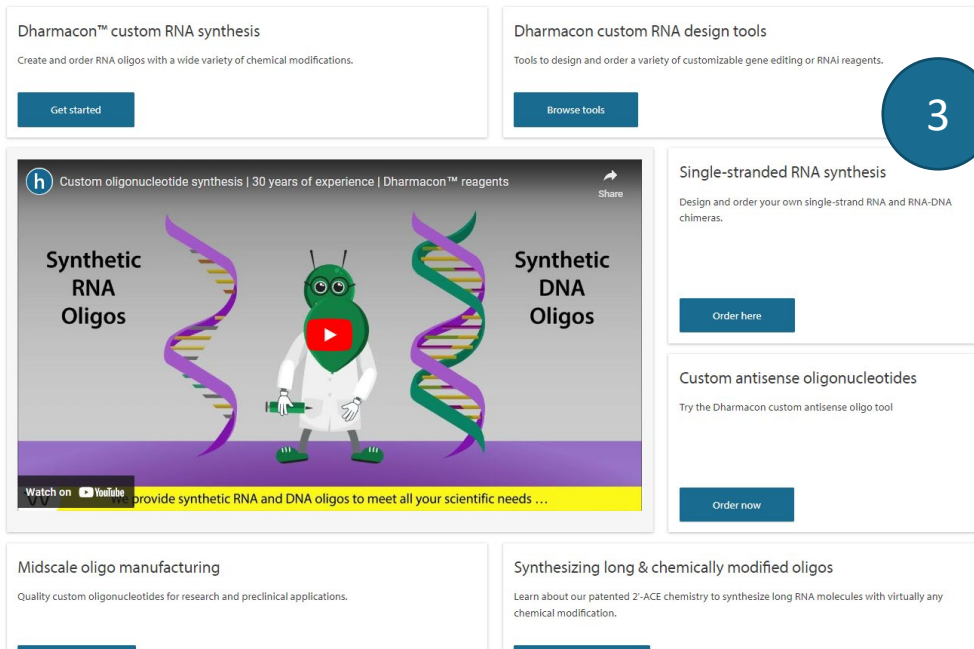


Custom Synthesis Tools



1. Select Products from the main navigation menu
2. Select Custom Oligonucleotides
3. This will bring up the main custom synthesis page with information and links to all our custom synthesis services and products

Products -> Custom Oligonucleotides



Custom RNA Synthesis

Custom synthesis can be ordered as a single synthesis or multiple.

1. Select the “Order Single-strand RNA” link for a single custom synthesis.
2. Select the “Order Multiple Single-strand RNA” link for a multiple custom synthesis.

Products -> Custom oligo synthesis -> Custom RNA synthesis -> single-stranded RNA synthesis

horizon shop product, gene or brand Sign in Contact Us Cart

Products Services Application Areas Knowledge Base Support Order Center About Us Select Language United States

Dharmacon Custom RNA synthesis

Single-Strand and Multiple Single-Strand RNA customization has never been easier

No pre-designed product to fit your needs? Use our online design tools and extensive synthesis options to create a custom RNA. Numerous combinations of modifications, sizes, and purification options are available for convenient online ordering. Pricing, days to ship and add to cart are immediately available.

Ready To Get Started? Order Now

Order Single-strand RNA Order Multiple Single-strand RNA

If you need a non-standard chemical modification or modified nucleobase that is not available, please complete our [pricing request form](#), and our [Scientific Support](#) team will review and respond.

Additional Resources

[Watch a short video](#)
Watch our short video on how-to-use the custom single strand RNA synthesis tool

[Need Custom DNA?](#)
Use our convenient tools to order the custom DNA oligo that fits your needs.

Overview Deprotection Dye Labels Modifications and Pricing Purification and Processing

Dharmacon RNA synthesis capabilities are well beyond the industry standard

- Long RNA oligos
- Custom RNA inhibitors for the study of microRNA biology
- Custom phosphoramidites
- Specialized chemical modifications or modified bases

RNA oligonucleotides can be modified at any position:

- 5'-end modifications
- 2'-end modifications
- 2'-OH modifications
- 3'-OH modifications
- Internal Labeling

*For ssRNA inquiries longer than the online order limit please contact [Scientific Support](#) or complete a [custom pricing request](#).

Oligo Name: test

Purification: HPLC Purification

Scale: 1.0 µmol

Post Synthesis: 2'-Deprotect / Desalt

Available 5' Modifications: FI

Sequence: Please Click on Refresh Price for updated sequence. AUC UAG AUG AUG AUG AUG UAG UGA UGA U

Internal Modifications: None

Available 3' Modifications: TEG-Chi-3'

\$185.00

\$60.00

Custom DNA Synthesis

Custom synthesis can be ordered as a single synthesis or multiple.

1. Select the “Order Single-strand DNA” link for a single custom synthesis.
2. Select the “Order Multiple Single-strand DNAs” link for a multiple custom synthesis.

Products -> Custom oligo synthesis-> Custom DNA synthesis

Custom DNA synthesis

Use our convenient online tools to order the custom DNA oligo that fits your experimental needs. Whether you are in need of primers for PCR, DNA donor oligos for gene editing using homology-directed repair (HDR), or something in between, we enable your research with custom DNA up to 150 bases in length.

DNA synthesis capabilities supports applications which may require:

- DNA donor oligos for CRISPR-Cas9 HDR
- Primers and templates
- Multiple stabilizing modifications for research products

The screenshot shows a navigation menu with 'Products', 'Supporting Data', and 'Related Products'. A red box highlights two product links: 'Order Single-strand DNA' and 'Order Multiple Single-strand DNAs'. A blue circle with the number '1' points to the 'Order Single-strand DNA' link, and another blue circle with the number '2' points to the 'Order Multiple Single-strand DNAs' link. The text below the links describes the synthesis capabilities: 'Custom DNA synthesis of up to 150 bases at either 0.05 nmol or 1.0 μmol scale, with the option of HPLC purification.' and 'Use this online tool to order multiple custom DNA oligos with the same characteristics (scale, purification, 5' modification)'.

The screenshot shows the configuration form for custom DNA synthesis. It includes fields for 'Oligo Name' (My DNA), 'Purification' (HPLC Purification), 'Scale' (0.05 μmol), and 'Post Synthesis' (Desalt). The '5' Modifications' dropdown is set to '5'-P'. The 'Internal Modifications' dropdown is set to 'None'. The sequence input field contains 'AAC ACA CGA GCA CTG ACT ACG ACT ACG CTA GC (dN) (dN)'. The 'Synthesis' section shows: Length: 34, GC Content: 50.00%, Mol. Weight: 10,454.27 g/mol, E260: 332,700 L/(mol*cm). The 'Sequence Price' is \$110.50, 'Setup Charge' is \$17.00, 'Unit Price' is \$227.50, and 'Days to Ship' is 10. There are 'Refresh Price' and 'Add To Cart' buttons at the bottom right.

Custom microRNA Synthesis

Custom microRNA

Modify an existing microRNA mimic or request a novel microRNA, or request an Accell™ microRNA inhibitor or stabilized mimic for special applications.

Custom microRNA

1

Use our online ordering tool to easily create your custom microRNA and have our proprietary miRIDIAN mimic modification pattern applied to your sequence.

Multiple scales and processing options are available, as well as a wide variety of 5' and 3' modifications. Watch our step-by-step [video tutorial](#) to learn how to use the custom miRNA ordering tool.

Alternatively, if you would prefer a custom generated quote fill out the [custom synthesis quote form](#).

Overview Products Resources

Additional microRNA modulation tools are available by Technical Support quote

Step One

Select Options in order to determine available scale

Oligo Name *

My microRNA

Processing

Standard (A4)

Scale *

40 nmol (0.05 μmol Scale)

* The nmol size is the guaranteed amount of material you will receive for miRNA. Modifications will decrease this yield. For any questions, please contact us

Step Two

Enter or paste (ctrl+V) a 21-30 nt mature microRNA sequence from which both the active (guide) and passenger strands will be synthesized.

5' AACACAGCACUACUACGUAGCUAGC 3'

Reset All

Populate

Contact Scientific Support for stabilized mimics, to add mismatches within your mimic sequence, Accell inhibitors and custom miRIDIAN hairpin inhibitors.

Messages:

Step 3

See all Bases and Modifications for microRNA mimic synthesis

5'	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	3'	
No mods	U	A	G	C	U	A	C	G	U	A	G	U	A	G	U	G	C	U	G	U	G	U	U	U	U	No mods	Passenger
No mods	C	G	A	U	C	G	A	U	G	C	A	U	C	A	C	G	A	C	A	C	A	A				5'-P	Active
3'	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		5'

Metric	Sense	Antisense	Duplex
GC:	43.48 %	43.48 %	N/A
Mol. Wt.	7,954.76 g/mol	8,027.87 g/mol	15,982.63 g/mol
E ₂₆₀	251,400	249,400	445,712

Pricing	
Total Price:	\$459.00
Days to Manufacture:	4

1. Select the “Custom microRNA” link for up to 7500nmols size.

Products -> Custom oligo synthesis-> Custom microRNA

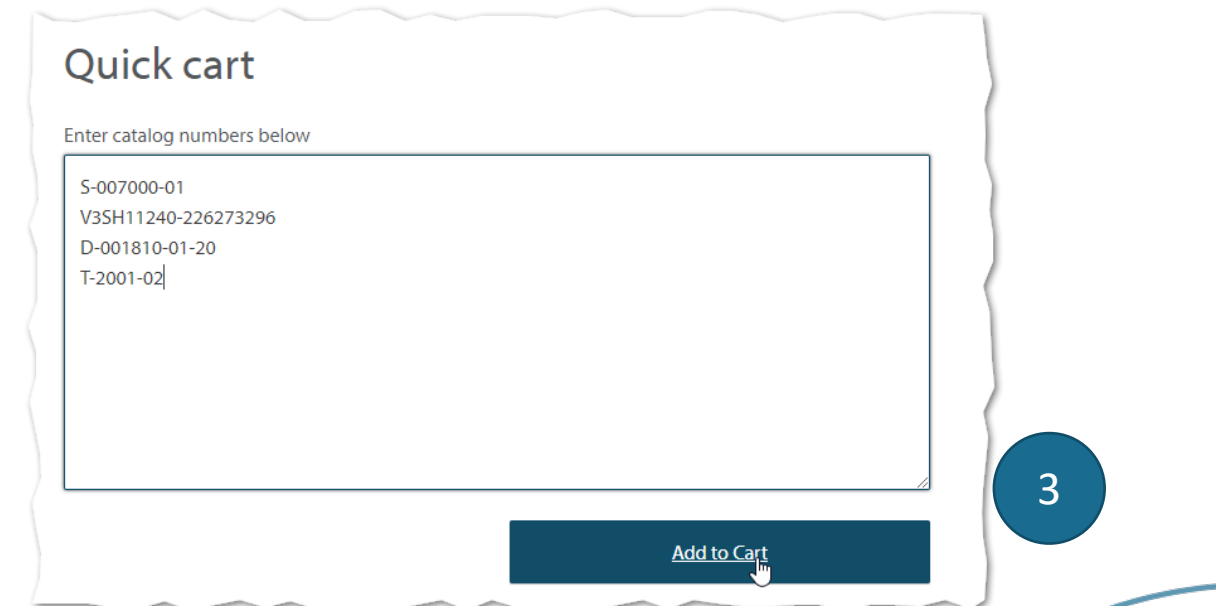
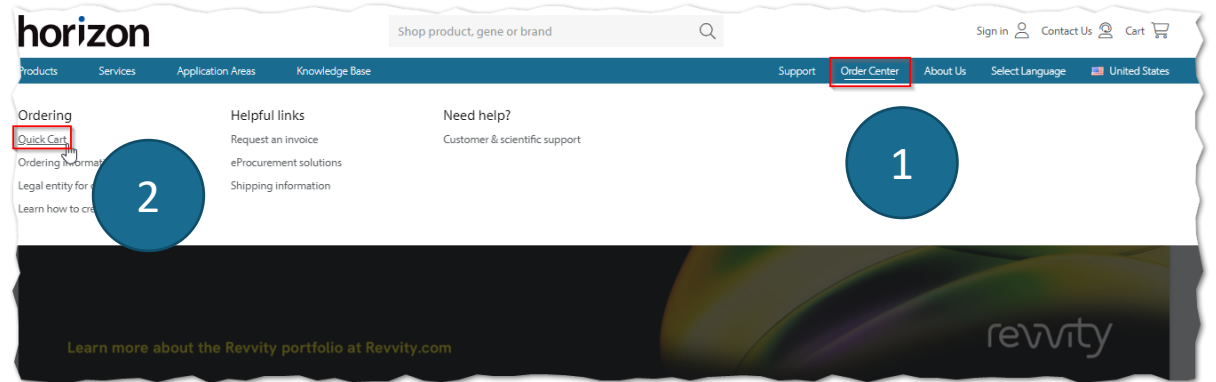
Quick Cart



Quick Cart

1. From the main navigation menu, select “Quotes and Orders”
2. Select Quick Cart
3. Enter your catalog numbers into the text box and select Add to Cart.

Order Center -> Quick Cart



Shopping Cart



Your shopping cart

horizon Shop product, gene or brand

Products Services Application Areas Knowledge Base Support Order Center About Us Select Language United States

Gene modulation > RNA interference > siRNA solutions by Dharmacon™ > ON-TARGETplus siRNA

ON-TARGETplus siRNA

siRNA designed and modified for greater specificity

- Guaranteed gene silencing
- Patented modifications to reduce off-targets
- Available as individual siRNA or in SMARTpool format – for human, mouse or rat

PTEN (Human) Entrez Gene 5728 Search another gene

phosphatase and tensin homolog

Select Product for: ON-TARGETplus Human PTEN siRNA

1. Contents

Individual SMARTPool Set of 4

Select your product to view pricing

Description Guarantee Controls & Related Products Supporting Data References Resources

1

1. Select the shopping cart icon at any time to view your shopping cart.
2. You can append/decrement/remove individual items in your cart
3. Select Checkout Now to check out
4. You can enter promo codes, apply, and view your new price.

Cart (4 items)

Items	Unit Price	Qty	Sub-total
CRISPRmod CRISPRi Human PTEN lentiviral sgRNA, 100 µL, 10⁸ TU/mL Unit Size: 100 µL, 10 ⁸ TU/mL Shipping Condition: Dry Ice Catalog ID: VSGH12234-250176551	Unit Price \$835.00	- 1 + Remove	
ON-TARGETplus Human PTEN (\$728) siRNA - Individual, 10 nmol Unit Size: 10 nmol Shipping Condition: Ambient Catalog ID: J-003023-09-0010	Unit Price \$363.00	- 1 + Remove	\$363.00 ships in 4 business days
DharmaFECT 1 Transfection Reagent, 0.2 mL Unit Size: 0.2 mL Shipping Condition: Ambient Catalog ID: T-2001-01	Unit Price \$114.00	- 1 + Remove	\$114.00 ships same business day
ON-TARGETplus Cyclophilin B Control Pool (Human), 5 nmol Unit Size: 5 nmol Shipping Condition: Ambient Catalog ID: D-001820-10-05	Unit Price \$264.00	- 1 + Remove	\$264.00 ships same business day

Cart Summary

Subtotal \$1,576.00

Tax NA

Shipping est. \$94.00

Handling est. \$50.00

Subtotal est. \$1,720.00

Checkout Now

Promo Code(s) (Optional)

Apply Code

3

4